

## LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Claim 1 (currently amended)**

An apparatus for manufacturing a dry sheet from a slurry, comprising:

a coating section ~~for applying which coats~~ a slurry raw material to be formed ~~as into~~ a sheet, onto a carrier film transferred along a predetermined route;

a thickness-adjusting ~~means device which adjusts for adjusting~~ the thickness of the ~~a~~ the coating of the slurry raw material disposed on the carrier film;

a drying section ~~for drying which dries~~ the slurry raw material disposed on the carrier film to form a sheet;

a property-measuring ~~section for measuring device which measures~~ a predetermined property, related to the coating thickness of the slurry raw material disposed on the carrier film, in a wet mode before the material is dried in the drying section;

a density-measuring instrument which measures the density of the slurry raw material;

a memory section for storing data ~~which shows the representative of a~~ relation among ~~a~~ the wet-mode measurement of the property of the slurry raw material disposed on the carrier film, the density of the slurry raw material, and the final thickness of the sheet obtained ~~by drying after the slurry raw material is dried;~~

an operational section ~~for estimating which estimates a the~~ sheet thickness on the basis of the data stored in the memory section, ~~by calculation from a target value of the sheet thickness,~~ the value of the property of the slurry raw material measured ~~in by~~ the property-measuring ~~section device,~~ and the density of the slurry raw material, ~~to compare and compares~~ the estimated value with a target value of the sheet thickness; and

an output adjusting ~~output-section for transmitting which transmits~~ thickness-adjusting signals to the thickness-adjusting ~~means on the basis of a~~ device in response to the comparison result obtained in the operational section.

**Claim 2 (currently amended)**

The apparatus for manufacturing a sheet according to Claim 1, wherein the property includes a radiation attenuation amount, and the property-measuring device section includes a radiation thickness gauge ~~and the property includes a radiation attenuation amount obtained by applying which applies~~ radiation rays to the slurry raw material in the thickness direction of the slurry raw material.

**Claim 3 (currently amended)**

The apparatus for manufacturing a sheet according to Claim 1 or 2, wherein the thickness-adjusting ~~means~~ device includes a slurry-discharging device for feeding a controlled amount of the slurry raw material to the coating section in response to the thickness-adjusting signals.

**Claim 4 (currently amended)**

The apparatus for manufacturing a sheet according to Claim 1 or 2, wherein the coating section includes a slurry coater and a backing roll which is arranged face to face with the slurry coater ~~so that a~~ with an adjustable gap can be adjusted, and also functions therebetween, the slurry coater being responsive to the thickness-adjusting means signals and thereby functioning as said thickness-adjusting device.

**Claim 5 (currently amended)**

The apparatus for manufacturing a sheet according to Claim 1, ~~further comprising~~ wherein the a density-measuring instrument for measuring the density of the slurry raw material ~~[[,]] is placed at near at least one of a storing section for storing where the slurry raw material or placed is stored, or a channel through which for feeding the slurry raw material is fed.~~

**Claim 6 (currently amended)**

The apparatus for manufacturing a sheet according to Claim 1, wherein t, an estimated value

of the final thickness of the sheet obtained by after drying the slurry raw material on the carrier film, is determined according to the following equation (1):

$$t = (W - c) / K2 \quad (1)$$

where W represents an area weight obtained by converting a measurement of the property of the slurry raw material, before drying, disposed on the carrier film, into the area weight of a predetermined material with the same measurement of the property as the above; c represents an area weight obtained by converting a measurement of a property of the carrier film only, measured in the same manner as the slurry raw material on the carrier film, into the area weight of the predetermined material with the same measurement of the property as the above; and K2 represents a conversion coefficient determined by the following equation (2):

$$K2 = (h \times G) + k \quad (2)$$

where h represents a correction coefficient and k represents a correcting standard value, both of which are determined according to the target thickness T of the sheet, and G represents the density of the slurry raw material.